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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,433	01/10/2002	Gopinath Baddepudi		6956

7590 09/24/2003

BADDEPUDI GOPINATH  
301-SARALARAMAM APARTMENTS  
16-11-310-8 SALIMNAGAR  
HYDERABAD, A.P., 500036  
INDIA

EXAMINER

DRUAN, THOMAS J

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 09/24/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Applicant No.	Applicant(s)
	10/042,433	BADDEPUDI, GOPINATH
	Examiner	Art Unit
	Thomas J. Druan, Jr.	3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on the 21<sup>st</sup> and 26<sup>th</sup> of June, 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: *Misc. Letter* .

1. The amendments to the claims filed on the 21<sup>st</sup> and 26<sup>th</sup> of June do not comply with the requirements of 37 CFR 1.121(c) because there are several deficiencies with the reply, as described in greater detail below. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

(c) *Claims.* Amendments to a claim must be made by rewriting the entire claim with all changes (e.g., additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(1) *Claim listing.* All of the claims presented in a claim listing shall be presented in ascending numerical order. Consecutive claims having the same status of "canceled" or "not entered" may be aggregated into one statement (e.g., Claims 1–5 (canceled)). The claim listing shall commence on a separate sheet of the amendment document and the sheet(s) that contain the text of any part of the claims shall not contain any other part of the amendment.

(2) *When claim text with markings is required.* All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "currently amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

(3) *When claim text in clean version is required.* The text of all pending claims not being currently amended shall be presented in the claim

listing in clean version, *i.e.*, without any markings in the presentation of text. The presentation of a clean version of any claim having the status of "original," "withdrawn" or "previously presented" will constitute an assertion that it has not been changed relative to the immediate prior version, except to omit markings that may have been present in the immediate prior version of the claims of the status of "withdrawn" or "previously presented." Any claim added by amendment must be indicated with the status of "new" and presented in clean version, *i.e.*, without any underlining.

*(4) When claim text shall not be presented; canceling a claim.*

(i) No claim text shall be presented for any claim in the claim listing with the status of "canceled" or "not entered."

(ii) Cancellation of a claim shall be effected by an instruction to cancel a particular claim number. Identifying the status of a claim in the claim listing as "canceled" will constitute an instruction to cancel the claim.

*(5) Reinstatement of previously canceled claim.* A claim which was previously canceled may be reinstated only by adding the claim as a "new" claim with a new claim number.

When making changes to the specification, reference to specific paragraphs that need to be replaced or deleted is required. Reference to a device, such as "Device B" is unclear in terms of explicit directions for amendment. By giving specific paragraph-by-paragraph instructions, it is easier to know for sure what is being amended and how it is being amended. Regarding the claims, claim numbers cannot be re-used. Once a claim is cancelled, the claim is labeled as such, and any new claims must be added on as the next unused claim number. Please see attachments concerning amendments, particularly 37 CFR 1.111(b) and 37 CFR 1.121(c).

Multiple embodiments are not allowed to be claimed in a single claim. If one wishes to protect multiple embodiments with a single claim, the claim must be broad enough to cover each of the embodiments. Dependent claims can narrow the scope of the independent claim in order to further define each

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embodiment. Attention is drawn to US Patent No. 6,052,910 cited in the previous Office Action. Figures 3 and 4 show two different embodiments of a cutting member. Claim 1 of that patent is broad enough to cover both embodiments, while claim 6 covers the embodiment of fig. 3 and claim 7 covers the embodiment of fig. 4. Attention is drawn to the attachment containing MPEP § 806.05 regarding Related Inventions.

The numbering of figures cannot skip intermediate numbers. Therefore, when a figure is cancelled, the remaining figures must be amended for proper sequential numbering throughout. See 37 CFR 1.84(u).

Applicant should be aware of the restrictions concerning new matter. Any subject matter that has been added to the application that was not directly supported in the application as it was originally filed is considered new matter and cannot be entered. See MPEP § 2163.06.

An examination of this application and responses reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

Applicant is advised of the availability of the publication "Attorneys and Agents Registered to Practice Before the U.S. Patent and Trademark Office."

This publication is for sale by the Superintendent of Documents, U.S.

Government Printing Office, Washington, D.C. 20402.

2. Since the replies filed on the 21<sup>st</sup> and 26<sup>th</sup> of June appear to be *bona fide*, applicant is given a TIME PERIOD of **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to submit an amendment in compliance with 37 CFR 1.121 in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Druan, Jr. whose telephone number is 703-308-4200. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

*an*  
220  
tjd  
September 23, 2003

Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700

naming that inventor if the reissue application seeks to claim subject matter:

(i) Which was not covered by claims issued in the patent prior to the date of publication of the statutory invention registration; and

(ii) Which was the same subject matter waived in the statutory invention registration.

(d) *Citation of references.*

(1) If domestic patents are cited by the examiner, their numbers and dates, and the names of the patentees must be stated. If foreign published applications or patents are cited, their nationality or country, numbers and dates, and the names of the patentees must be stated, and such other data must be furnished as may be necessary to enable the applicant, or in the case of a reexamination proceeding, the patent owner, to identify the published applications or patents cited. In citing foreign published applications or patents, in case only a part of the document is involved, the particular pages and sheets containing the parts relied upon must be identified. If printed publications are cited, the author (if any), title, date, pages or plates, and place of publication, or place where a copy can be found, shall be given.

(2) When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

(e) *Reasons for allowance.* If the examiner believes that the record of the prosecution as a whole does not make clear his or her reasons for allowing a claim or claims, the examiner may set forth such reasoning. The reasons shall be incorporated into an Office action rejecting other claims of the application or patent under reexamination or be the subject of a separate communication to the applicant or patent owner. The applicant or patent owner may file a statement commenting on the reasons for allowance within such time as may be specified by the examiner. Failure to file such a statement does not give rise to any implication that the applicant or patent owner agrees with or acquiesces in the reasoning of the examiner.

[43 FR 20465, May 11, 1978; 46 FR 29182, May 29, 1981; para. (d), 47 FR 41276, Sept. 17, 1982, effective date Oct. 1, 1982; para. (e), 50 FR 9381, Mar. 7, 1985, effective May 8, 1985; para. (e), 57 FR

29642, July 6, 1992, effective Sept. 4, 1992; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.105 [Reserved]

[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.106 [Reserved]

[24 FR 10332, Dec. 22, 1959; 34 FR 18857, Nov. 26, 1969; para. (c) added, 47 FR 21752, May 19, 1982, effective July 1, 1982; paras. (d) and (e), 50 FR 9381, Mar. 7, 1985, effective May 8, 1985; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.107 [Reserved]

[46 FR 29182, May 29, 1981; para. (a) revised, 61 FR 42790, Aug. 19, 1996, effective Sept. 23, 1996; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.108 [Reserved]

[50 FR 9381, Mar. 7, 1985, effective May 8, 1985; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.109 [Reserved]

[46 FR 29182, May 29, 1981; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

§ 1.110 Inventorship and date of invention of the subject matter of individual claims.

When more than one inventor is named in an application or patent, the Patent and Trademark Office, when necessary for purposes of an Office proceeding, may require an applicant, patentee, or owner to identify the inventive entity of the subject matter of each claim in the application or patent. Where appropriate, the invention dates of the subject matter of each claim and the ownership of the subject matter on the date of invention may be required of the applicant, patentee or owner. See also §§ 1.78(c) and 1.130.

[50 FR 9381, Mar. 7, 1985, effective date May 8, 1985; revised, 61 FR 42790, Aug. 19, 1996, effective Sept. 23, 1996]

ACTION BY APPLICANT AND FURTHER CONSIDERATION

§ 1.111 Reply by applicant or patent owner.

(a) After the Office action, if adverse in any respect, the applicant or patent owner, if he or she persists in his or her application for a patent or reexamination proceeding, must reply thereto and may request reconsideration or further examination, with or without amendment.

(b) In order to be entitled to reconsideration or further examination, the applicant or patent owner must

reply to the Office action. The reply by the applicant or patent owner must be reduced to a writing which distinctly and specifically points out the supposed errors in the examiner's action and must reply to every ground of objection and rejection in the prior Office action. The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. If the reply is with respect to an application, a request may be made that objections or requirements as to form not necessary to further consideration of the claims be held in abeyance until allowable subject matter is indicated. The applicant's or patent owner's reply must appear throughout to be a *bona fide* attempt to advance the application or the reexamination proceeding to final action. A general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section.

(c) In amending in response to a rejection of claims in an application or patent undergoing reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. (See §§ 1.135 and 1.136 for time for reply.)

[46 FR 29182, May 29, 1981; para. (b) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.112 Reconsideration before final action.

After reply by applicant or patent owner (§ 1.111) to a non-final action, the application or patent under reexamination will be reconsidered and again examined. The applicant or patent owner will be notified if claims are rejected, or objections or requirements made, in the same manner as after the first examination. Applicant or patent owner may reply to such Office action in the same manner provided in § 1.111, with or without amendment, unless such Office action indicates that it is made final (§ 1.113).

[46 FR 29182, May 29, 1981; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.113 Final rejection or action.

(a) On the second or any subsequent examination or consideration by the examiner the rejection or other action may be made final, whereupon applicant's or patent owner's reply is limited to appeal in the case of rejection of any claim (§ 1.191), or to amendment as specified in § 1.116. Petition may be taken to the Commissioner in the case of objections or requirements not involved in the rejection of any claim (§ 1.181). Reply to a final rejection or action must include cancellation of, or appeal from the rejection of, each rejected claim. If any claim stands allowed, the reply to a final rejection or action must comply with any requirements or objections as to form.

(b) In making such final rejection, the examiner shall repeat or state all grounds of rejection then considered applicable to the claims in the application, clearly stating the reasons in support thereof.

[24 FR 10332, Dec. 22, 1959; 46 FR 29182, May 29, 1981; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### AMENDMENTS

##### § 1.115 [Reserved]

[46 FR 29183, May 29, 1981; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

##### § 1.116 Amendments after final action or appeal.

(a) After a final rejection or other final action (§ 1.113), amendments may be made cancelling claims or complying with any requirement of form expressly set forth in a previous Office action. Amendments presenting rejected claims in better form for consideration on appeal may be admitted. The admission of, or refusal to admit, any amendment after final rejection, and any related proceedings, will not operate to relieve the application or patent under reexamination from its condition as subject to appeal or to save the application from abandonment under § 1.135.

(b) If amendments touching the merits of the application or patent under reexamination are presented after final rejection, or after appeal has been taken, or when such amendment might not otherwise be proper, they may be admitted upon a showing of good and sufficient reasons why they are necessary and were not earlier presented.

(c) No amendment can be made as a matter of right in appealed cases. After decision on appeal, amendments can only be made as provided in § 1.198, or to carry into effect a recommendation under § 1.196.

[24 FR 10332, Dec. 22, 1959; 46 FR 29183, May 29, 1981; para. (a) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.117 [Reserved]

[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.118 [Reserved]

[48 FR 2712, Jan. 20, 1983, effective Feb. 27, 1983; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.119 [Reserved]

[32 FR 13583, Sept. 28, 1967; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

#### § 1.121 Manner of making amendments.

(a) *Amendments in nonprovisional applications, other than reissue applications:* Amendments in nonprovisional applications, excluding reissue applications, are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Except as provided in § 1.125, amendments to add matter to, or delete matter from, the specification, other than to the claims, may only be made as follows:

(i) *Instructions for insertions:* The precise point in the specification must be indicated where an insertion is to be made, and the matter to be inserted must be set forth.

(ii) *Instructions for deletions:* The precise point in the specification must be indicated where a deletion is to be made, and the matter to be deleted must be set forth or otherwise indicated.

(iii) *Matter deleted by amendment* can be reinstated only by a subsequent amendment presenting the previously deleted matter as a new insertion.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i) *Instructions for insertions and deletions:* A claim may be amended by specifying only the exact matter to be deleted or inserted by an amendment and the precise point where the deletion or insertion is to be made, where the changes are limited to:

(A) Deletions and/or

(B) The addition of no more than five (5) words in any one claim; or

(ii) *Claim cancellation or rewriting:* A claim may be amended by directions to cancel the claim or by rewriting such claim with underlining below the matter

added and brackets around the matter deleted. The rewriting of a claim in this form will be construed as directing the deletion of the previous version of that claim. If a previously rewritten claim is again rewritten, underlining and bracketing will be applied relative to the previous version of the claim, with the parenthetical expression "twice amended," "three times amended," etc., following the original claim number. The original claim number followed by that parenthetical expression must be used for the rewritten claim. No interlineations or deletions of any prior amendment may appear in the currently submitted version of the claim. A claim canceled by amendment (not deleted and rewritten) can be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number.

##### (3) *Drawings.*

(i) Amendments to the original application drawings are not permitted. Any change to the application drawings must be by way of a substitute sheet of drawings for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

##### (4) [Reserved]

(5) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(6) No amendment may introduce new matter into the disclosure of an application.

(b) *Amendments in reissue applications:* Amendments in reissue applications are made by filing a paper, in compliance with § 1.52, directing that specified amendments be made.

(1) *Specification other than the claims.* Amendments to the specification, other than to the claims, may only be made as follows:

(i) Amendments must be made by submission of the entire text of a newly added or rewritten paragraph(s) with markings pursuant to paragraph (b)(1)(iii) of this section, except that an entire paragraph may be deleted by a statement deleting the paragraph without presentation of the text of the paragraph.

(ii) The precise point in the specification must be indicated where the paragraph to be amended is located.

(iii) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made.

(2) *Claims.* Amendments to the claims may only be made as follows:

(i) (A) The amendment must be made relative to the patent claims in accordance with paragraph (b)(6) of this section and must include the entire text of each claim which is being amended by the current amendment and of each claim being added by the current amendment with markings pursuant to paragraph (b)(2)(i)(C) of this section, except that a patent claim or added claim should be cancelled by a statement cancelling the patent claim or added claim without presentation of the text of the patent claim or added claim.

(B) Patent claims must not be renumbered and the numbering of any claims added to the patent must follow the number of the highest numbered patent claim.

(C) Underlining below the subject matter added to the patent and brackets around the subject matter deleted from the patent are to be used to mark the amendments being made. If a claim is amended pursuant to paragraph (b)(2)(i)(A) of this section, a parenthetical expression "amended," "twice amended," etc., should follow the original claim number.

(ii) Each amendment submission must set forth the status (*i.e.*, pending or cancelled) as of the date of the amendment, of all patent claims and of all added claims.

(iii) Each amendment when originally submitted must be accompanied by an explanation of the support in the disclosure of the patent for the amendment along with any additional comments on page(s) separate from the page(s) containing the amendment.

(3) *Drawings.*

(i) Amendments to the original patent drawings are not permitted. Any change to the patent drawings must be by way of a new sheet of drawings with the amended figures identified as "amended" and with added figures identified as "new" for each sheet changed submitted in compliance with § 1.84.

(ii) Where a change to the drawings is desired, a sketch in permanent ink showing proposed changes in red, to become part of the record, must be filed for approval by the examiner and should be in a separate paper.

(4) The disclosure must be amended, when required by the Office, to correct inaccuracies of description and definition, and to secure substantial correspondence between the claims, the remainder of the specification, and the drawings.

(5) No reissue patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent, pursuant to 35 U.S.C. 251. No amendment to the patent may introduce new matter or be made in an expired patent.

(6) All amendments must be made relative to the patent specification, including the claims, and drawings, which is in effect as of the date of filing of the reissue application.

(c) *Amendments in reexamination proceedings:* Any proposed amendment to the description and claims in patents involved in reexamination proceedings must be made in accordance with § 1.530(d).

[32 FR 13583, Sept. 28, 1967; 46 FR 29183, May 29, 1981; para. (e), 49 FR 555, Jan. 4, 1984, effective Apr. 1, 1984; revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

**§ 1.122 [Reserved]**

[24 FR 10332, Dec. 22, 1959; para. (b), 49 FR 48416, Dec. 12, 1984, effective Feb. 11, 1985; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

**§ 1.123 [Reserved]**

[48 FR 2712, Jan. 20, 1983, effective Feb. 27, 1983; 49 FR 555, Jan. 4, 1984, effective Apr. 1, 1984; amended, 58 FR 38719, July 20, 1993, effective Oct. 1, 1993; removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

**§ 1.124 [Reserved]**

[Removed and reserved, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

**§ 1.125 Substitute specification.**

(a) If the number or nature of the amendments or the legibility of the application papers renders it difficult to consider the application, or to arrange the papers for printing or copying, the Office may require the entire

same applicant or owned by a common assignee disclosing and claiming that subject matter.

## THE DRAWINGS

### § 1.81 Drawings required in patent application.

(a) The applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented; this drawing, or a high quality copy thereof, must be filed with the application. Since corrections are the responsibility of the applicant, the original drawing(s) should be retained by the applicant for any necessary future correction.

(b) Drawings may include illustrations which facilitate an understanding of the invention (for example, flowsheets in cases of processes, and diagrammatic views).

(c) Whenever the nature of the subject matter sought to be patented admits of illustration by a drawing without its being necessary for the understanding of the subject matter and the applicant has not furnished such a drawing, the examiner will require its submission within a time period of not less than two months from the date of the sending of a notice thereof.

(d) Drawings submitted after the filing date of the application may not be used to overcome any insufficiency of the specification due to lack of an enabling disclosure or otherwise inadequate disclosure therein, or to supplement the original disclosure thereof for the purpose of interpretation of the scope of any claim.

[43 FR 4015, Jan. 31, 1978; para. (a), 53 FR 47809, Nov. 28, 1988, effective Jan. 1, 1989]

### § 1.83 Content of drawing.

(a) The drawing in a nonprovisional application must show every feature of the invention specified in the claims. However, conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).

(b) When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will

suffice to show the connection of the invention therewith.

(c) Where the drawings in a nonprovisional application do not comply with the requirements of paragraphs (a) and (b) of this section, the examiner shall require such additional illustration within a time period of not less than two months from the date of the sending of a notice thereof. Such corrections are subject to the requirements of § 1.81(d).

[31 FR 12923, Oct. 4, 1966; 43 FR 4015, Jan. 31, 1978; paras. (a) and (c) revised, 60 FR 20195, Apr. 25, 1995, effective June 8, 1995]

### § 1.84 Standards for drawings.

(a) *Drawings.* There are two acceptable categories for presenting drawings in utility patent applications:

(1) *Black ink.* Black and white drawings are normally required. India ink, or its equivalent that secures solid black lines, must be used for drawings, or

(2) *Color.* On rare occasions, color drawings may be necessary as the only practical medium by which to disclose the subject matter sought to be patented in a utility patent application or the subject matter of a statutory invention registration. The Patent and Trademark Office will accept color drawings in utility patent applications and statutory invention registrations only after granting a petition filed under this paragraph explaining why the color drawings are necessary. Any such petition must include the following:

(i) The fee set forth in § 1.17(i);

(ii) Three (3) sets of color drawings; and

(iii) The specification must contain the following language as the first paragraph in that portion of the specification relating to the brief description of the drawing:

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawing(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

If the language is not in the specification, a proposed amendment to insert the language must accompany the petition.

#### (b) *Photographs.*

(1) *Black and white.* Photographs are not ordinarily permitted in utility patent applications. However, the Office will accept photographs in utility patent applications only after the granting of a petition filed under this paragraph which requests that

photographs be accepted. Any such petition must include the following:

- (i) The fee set forth in § 1.17(i); and
- (ii) Three (3) sets of photographs.

Photographs must either be developed on double weight photographic paper or be permanently mounted on bristol board. The photographs must be of sufficient quality so that all details in the drawings are reproducible in the printed patent.

(2) *Color.* Color photographs will be accepted in utility patent applications if the conditions for accepting color drawings have been satisfied. See paragraph (a)(2) of this section.

(c) *Identification of drawings.* Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawings a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page. In addition, a reference to the application number, or, if an application number has not been assigned, the inventor's name, may be included in the left-hand corner, provided that the reference appears within 1.5 cm. (5/8 inch) from the top of the sheet.

(d) *Graphic forms in drawings.* Chemical or mathematical formulae, tables, and waveforms may be submitted as drawings and are subject to the same requirements as drawings. Each chemical or mathematical formula must be labeled as a separate figure, using brackets when necessary, to show that information is properly integrated. Each group of waveforms must be presented as a single figure, using a common vertical axis with time extending along the horizontal axis. Each individual waveform discussed in the specification must be identified with a separate letter designation adjacent to the vertical axis.

(e) *Type of paper.* Drawings submitted to the Office must be made on paper which is flexible, strong, white, smooth, non-shiny, and durable. All sheets must be free from cracks, creases, and folds. Only one side of the sheet shall be used for the drawing. Each sheet must be reasonably free from erasures and must be free from alterations, overwritings, and interlineations. Photographs must either be developed on double weight photographic paper or be permanently mounted on

bristol board. See paragraph (b) of this section for other requirements for photographs.

(f) *Size of paper.* All drawing sheets in an application must be the same size. One of the shorter sides of the sheet is regarded as its top. The size of the sheets on which drawings are made must be:

- (1) 21.0 cm. by 29.7 cm. (DIN size A4), or
- (2) 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches).

(g) *Margins.* The sheets must not contain frames around the sight (*i.e.*, the usable surface), but should have scan target points (*i.e.*, cross-hairs) printed on two catercorner margin corners. Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch), thereby leaving a sight no greater than 17.0 cm. by 26.2 cm. on 21.0 cm. by 29.7 cm. (DIN size A4) drawing sheets, and a sight no greater than 17.6 cm. by 24.4 cm. (6 15/16 by 9 5/8 inches) on 21.6 cm. by 27.9 cm. (8 1/2 by 11 inch) drawing sheets.

(h) *Views.* The drawing must contain as many views as necessary to show the invention. The views may be plan, elevation, section, or perspective views. Detail views of portions of elements, on a larger scale if necessary, may also be used. All views of the drawing must be grouped together and arranged on the sheet(s) without wasting space, preferably in an upright position, clearly separated from one another, and must not be included in the sheets containing the specifications, claims, or abstract. Views must not be connected by projection lines and must not contain center lines. Waveforms of electrical signals may be connected by dashed lines to show the relative timing of the waveforms.

(1) *Exploded views.* Exploded views, with the separated parts embraced by a bracket, to show the relationship or order of assembly of various parts are permissible. When an exploded view is shown in a figure which is on the same sheet as another figure, the exploded view should be placed in brackets.

(2) *Partial views.* When necessary, a view of a large machine or device in its entirety may be broken into partial views on a single sheet, or extended over several sheets if there is no loss in facility of understanding the view. Partial views drawn on separate sheets must always be capable of being linked edge to edge so that no partial view contains parts of another partial view. A smaller scale view should be included showing the whole formed

by the partial views and indicating the positions of the parts shown. When a portion of a view is enlarged for magnification purposes, the view and the enlarged view must each be labeled as separate views.

(i) Where views on two or more sheets form, in effect, a single complete view, the views on the several sheets must be so arranged that the complete figure can be assembled without concealing any part of any of the views appearing on the various sheets.

(ii) A very long view may be divided into several parts placed one above the other on a single sheet. However, the relationship between the different parts must be clear and unambiguous.

(3) *Sectional views.* The plane upon which a sectional view is taken should be indicated on the view from which the section is cut by a broken line. The ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view, and should have arrows to indicate the direction of sight. Hatching must be used to indicate section portions of an object, and must be made by regularly spaced oblique parallel lines spaced sufficiently apart to enable the lines to be distinguished without difficulty. Hatching should not impede the clear reading of the reference characters and lead lines. If it is not possible to place reference characters outside the hatched area, the hatching may be broken off wherever reference characters are inserted. Hatching must be at a substantial angle to the surrounding axes or principal lines, preferably 45°. A cross section must be set out and drawn to show all of the materials as they are shown in the view from which the cross section was taken. The parts in cross section must show proper material(s) by hatching with regularly spaced parallel oblique strokes, the space between strokes being chosen on the basis of the total area to be hatched. The various parts of a cross section of the same item should be hatched in the same manner and should accurately and graphically indicate the nature of the material(s) that is illustrated in cross section. The hatching of juxtaposed different elements must be angled in a different way. In the case of large areas, hatching may be confined to an edging drawn around the entire inside of the outline of the area to be hatched. Different types of hatching should have different conventional meanings as regards the nature of a material seen in cross section.

(4) *Alternate position.* A moved position may be shown by a broken line superimposed upon a suitable

view if this can be done without crowding; otherwise, a separate view must be used for this purpose.

(5) *Modified forms.* Modified forms of construction must be shown in separate views:

(i) *Arrangement of views.* One view must not be placed upon another or within the outline of another. All views on the same sheet should stand in the same direction and, if possible, stand so that they can be read with the sheet held in an upright position. If views wider than the width of the sheet are necessary for the clearest illustration of the invention, the sheet may be turned on its side so that the top of the sheet, with the appropriate top margin to be used as the heading space, is on the right-hand side. Words must appear in a horizontal, left-to-right fashion when the page is either upright or turned so that the top becomes the right side, except for graphs utilizing standard scientific convention to denote the axis of abscissas (of X) and the axis of ordinates (of Y).

(j) *View for Official Gazette.* One of the views should be suitable for publication in the *Official Gazette* as the illustration of the invention.

(k) *Scale.*

(1) The scale to which a drawing is made must be large enough to show the mechanism without crowding when the drawing is reduced in size to two-thirds in reproduction. Views of portions of the mechanism on a larger scale should be used when necessary to show details clearly. Two or more sheets may be used if one does not give sufficient room. The number of sheets should be kept to a minimum.

(2) When approved by the examiner, the scale of the drawing may be graphically represented. Indications such as "actual size" or "scale 1/2" on the drawings, are not permitted, since these lose their meaning with reproduction in a different format.

(3) Elements of the same view must be in proportion to each other, unless a difference in proportion is indispensable for the clarity of the view. Instead of showing elements in different proportion, a supplementary view may be added giving a larger-scale illustration of the element of the initial view. The enlarged element shown in the second view should be surrounded by a finely drawn or "dot-dash" circle in the first view indicating its location without obscuring the view.

(l) *Character of lines, numbers, and letters.* All drawings must be made by a process which will give them satisfactory reproduction characteristics. Every line,

number, and letter must be durable, clean, black (except for color drawings), sufficiently dense and dark, and uniformly thick and well-defined. The weight of all lines and letters must be heavy enough to permit adequate reproduction. This requirement applies to all lines however fine, to shading, and to lines representing cut surfaces in sectional views. Lines and strokes of different thicknesses may be used in the same drawing where different thicknesses have a different meaning.

(m) *Shading.* The use of shading in views is encouraged if it aids in understanding the invention and if it does not reduce legibility. Shading is used to indicate the surface or shape of spherical, cylindrical, and conical elements of an object. Flat parts may also be lightly shaded. Such shading is preferred in the case of parts shown in perspective, but not for cross sections. See paragraph (h)(3) of this section. Spaced lines for shading are preferred. These lines must be thin, as few in number as practicable, and they must contrast with the rest of the drawings. As a substitute for shading, heavy lines on the shade side of objects can be used except where they superimpose on each other or obscure reference characters. Light should come from the upper left corner at an angle of 45°. Surface delineations should preferably be shown by proper shading. Solid black shading areas are not permitted, except when used to represent bar graphs or color.

(n) *Symbols.* Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification. Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable.

(o) *Legends.* Suitable descriptive legends may be used, or may be required by the Examiner, where necessary for understanding of the drawing, subject to approval by the Office. They should contain as few words as possible.

(p) *Numbers, letters, and reference characters.*

(1) Reference characters (numerals are preferred), sheet numbers, and view numbers must be plain and legible, and must not be used in association with brackets or inverted commas, or enclosed within out-

lines, e.g., encircled. They must be oriented in the same direction as the view so as to avoid having to rotate the sheet. Reference characters should be arranged to follow the profile of the object depicted.

(2) The English alphabet must be used for letters, except where another alphabet is customarily used, such as the Greek alphabet to indicate angles, wavelengths, and mathematical formulas.

(3) Numbers, letters, and reference characters must measure at least .32 cm. (1/8 inch) in height. They should not be placed in the drawing so as to interfere with its comprehension. Therefore, they should not cross or mingle with the lines. They should not be placed upon hatched or shaded surfaces. When necessary, such as indicating a surface or cross section, a reference character may be underlined and a blank space may be left in the hatching or shading where the character occurs so that it appears distinct.

(4) The same part of an invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts.

(5) Reference characters not mentioned in the description shall not appear in the drawings. Reference characters mentioned in the description must appear in the drawings.

(q) *Lead lines.* Lead lines are those lines between the reference characters and the details referred to. Such lines may be straight or curved and should be as short as possible. They must originate in the immediate proximity of the reference character and extend to the feature indicated. Lead lines must not cross each other. Lead lines are required for each reference character except for those which indicate the surface or cross section on which they are placed. Such a reference character must be underlined to make it clear that a lead line has not been left out by mistake. Lead lines must be executed in the same way as lines in the drawing. See paragraph (l) of this section.

(r) *Arrows.* Arrows may be used at the ends of lines, provided that their meaning is clear, as follows:

(1) On a lead line, a freestanding arrow to indicate the entire section towards which it points;

(2) On a lead line, an arrow touching a line to indicate the surface shown by the line looking along the direction of the arrow; or

(3) To show the direction of movement.

(s) *Copyright or Mask Work Notice.* A copyright or mask work notice may appear in the drawing, but must be placed within the sight of the drawing immediately below the figure representing the copyright or mask work material and be limited to letters having a print size of .32 cm. to .64 cm. (1/8 to 1/4 inches) high. The content of the notice must be limited to only those elements provided for by law. For example, “©1983 John Doe” (17 U.S.C. 401) and “\*M\* John Doe” (17 U.S.C. 909) would be properly limited and, under current statutes, legally sufficient notices of copyright and mask work, respectively. Inclusion of a copyright or mask work notice will be permitted only if the authorization language set forth in § 1.71(e) is included at the beginning (preferably as the first paragraph) of the specification.

(t) *Numbering of sheets of drawings.* The sheets of drawings should be numbered in consecutive Arabic numerals, starting with 1, within the sight as defined in paragraph (g) of this section. These numbers, if present, must be placed in the middle of the top of the sheet, but not in the margin. The numbers can be placed on the right-hand side if the drawing extends too close to the middle of the top edge of the usable surface. The drawing sheet numbering must be clear and larger than the numbers used as reference characters to avoid confusion. The number of each sheet should be shown by two Arabic numerals placed on either side of an oblique line, with the first being the sheet number and the second being the total number of sheets of drawings, with no other marking.

(u) *Numbering of views.*

(1) The different views must be numbered in consecutive Arabic numerals, starting with 1, independent of the numbering of the sheets and, if possible, in the order in which they appear on the drawing sheet(s). Partial views intended to form one complete view, on one or several sheets, must be identified by the same number followed by a capital letter. View numbers must be preceded by the abbreviation “FIG.” Where only a single view is used in an application to illustrate the claimed invention, it must not be numbered and the abbreviation “FIG.” must not appear.

(2) Numbers and letters identifying the views must be simple and clear and must not be used in association with brackets, circles, or inverted commas. The view numbers must be larger than the numbers used for reference characters.

(v) *Security markings.* Authorized security markings may be placed on the drawings provided they are outside the sight, preferably centered in the top margin.

(w) *Corrections.* Any corrections on drawings submitted to the Office must be durable and permanent.

(x) *Holes.* No holes should be made by applicant in the drawing sheets. (See § 1.152 for design drawings, § 1.165 for plant drawings, and § 1.174 for reissue drawings.)

[24 FR 10332, Dec. 22, 1959; 31 FR 12923, Oct. 4, 1966; 36 FR 9775, May 28, 1971; 43 FR 20464, May 11, 1978; 45 FR 73657, Nov. 6, 1980; paras. (a), (b), (i), (j), and (l) amended, paras. (n), (o), and (p) added, 53 FR 47809, Nov. 28, 1988, effective Jan. 1, 1989; revised, 58 FR 38719, July 20, 1993, effective Oct. 1, 1993; paras. (c), (f), (g), and (x) revised, 61 FR 42790, Aug. 19, 1996, effective Sept. 23, 1996; paras. (a)(2)(i), (b), (c) & (g) revised, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997]

**§ 1.85 Corrections to drawings.**

(a) The requirements of § 1.84 relating to drawings will be strictly enforced. A drawing not executed in conformity thereto, if suitable for reproduction, may be admitted for examination but in such case a new drawing must be furnished.

(b) The Patent and Trademark Office will not release drawings in applications having a filing date after January 1, 1989, or any drawings from any applications after January 1, 1991, for purposes of correction. If corrections are necessary, new corrected drawings must be submitted within the time set by the Office.

(c) When corrected drawings are required to be submitted at the time of allowance, the applicant is required to submit acceptable drawings within three months from the mailing of the “Notice of Allowability.” Within that three-month period, two weeks should be allowed for review of the drawings by the Drafting Branch. If the Office finds that correction is necessary, the applicant must submit a new corrected drawing to the Office within the original three-month period to avoid the necessity of obtaining an extension of time and paying the extension fee. Therefore, the applicant should file corrected drawings as soon as possible following the receipt of the Notice of Allowability. The provisions with respect to obtaining an extension of time relates only to the late filing of corrected drawings. The time limit for payment of the issue fee is a fixed

additional subject matter in the U.S. application was not adequately described in the foreign document.

## II. NARROWING OR SUBGENERIC CLAIM

The introduction of claim changes which involve narrowing the claims by introducing elements or limitations which are not supported by the as-filed disclosure is a violation of the written description requirement of 35 U.S.C. 112, first paragraph. In *Ex parte Ohshiro*, 14 USPQ2d 1750 (Bd. Pat. App. & Inter. 1989), the Board affirmed the rejection under 35 U.S.C. 112, first paragraph, of claims to an internal combustion engine which recited "at least one of said piston and said cylinder (head) having a recessed channel." The Board held that the application which disclosed a cylinder head with a recessed channel and a piston without a recessed channel did not specifically disclose the "species" of a channeled piston.

While this and other cases find that recitation of an undisclosed species may violate the description requirement, a change involving subgeneric terminology may or may not be acceptable. Applicant was not entitled to the benefit of a parent filing date when the claim was directed to a subgenus (a specified range of molecular weight ratios) where the parent application contained a generic disclosure and a specific example that fell within the recited range because the court held that subgenus range was not described in the parent application. *In re Lukach*, 442 F.2d 967, 169 USPQ 795 (CCPA 1971). On the other hand, in *Ex parte Sorenson*, 3 USPQ2d 1462 (Bd. Pat. App. & Inter. 1987), the subgeneric language of "aliphatic carboxylic acid" and "aryl carboxylic acid" did not violate the written description requirement because species falling within each subgenus were disclosed as well as the generic carboxylic acid. See also *In re Smith*, 458 F.2d 1389, 1395, 173 USPQ 679, 683 (CCPA 1972) ("Whatever may be the viability of an inductive-deductive approach to arriving at a claimed subgenus, it cannot be said that such a subgenus is necessarily described by a genus encompassing it and a species upon which it reads." (emphasis added)). Each case must be decided on its own facts in terms of what is reasonably communicated to those skilled in the art. *In re Wilder*, 736 F.2d 1516, 1520, 222 USPQ 369, 372 (Fed. Cir. 1984).

## III. RANGE LIMITATIONS

With respect to changing numerical range limitations, the analysis must take into account which ranges one

skilled in the art would consider inherently supported by the discussion in the original disclosure. In the decision in *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), the ranges described in the original specification included a range of "25%–60%" and specific examples of "36%" and "50%." A corresponding new claim limitation to "at least 35%" did not meet the description requirement because the phrase "at least" had no upper limit and caused the claim to read literally on embodiments outside the "25% to 60%" range, however a limitation to "between 35% and 60%" did meet the description requirement.

## 2163.06 Relationship of Written Description Requirement to New Matter

Lack of written description is an issue that generally arises with respect to the subject matter of a claim. If an applicant amends or attempts to amend the abstract, specification or drawings of an application, an issue of new matter will arise if the content of the amendment is not described in the application as filed. Stated another way, information contained in any one of the specification, claims or drawings of the application as filed may be added to any other part of the application without introducing new matter.

There are two statutory provisions that prohibit the introduction of new matter: 35 U.S.C. 132 – No amendment shall introduce new matter into the disclosure of the invention; and, similarly providing for a reissue application, 35 U.S.C. 251 – No new matter shall be introduced into the application for reissue.

## I. TREATMENT OF NEW MATTER

The rules provide for the treatment of new matter as follows:

### 37 CFR 1.118. Amendment of disclosure.

(a) No amendment shall introduce new matter into the disclosure of an application after the filing date of the application, see 37 CFR 1.53(b). All amendments to the specification, including the claims and the drawings filed after the filing date of the application must conform to at least one of them as it was at the time of the filing of the application. Matter not found in either, involving a departure from or an addition to the original disclosure, cannot be added to the application after its filing date even though supported by an oath or declaration in accordance with 37 CFR 1.63 or 37 CFR 1.67 filed after the filing date of the application.

(b) If it is determined that an amendment filed after the filing date of the application introduces new matter, claims containing new matter will be rejected and deletion of the new matter in the specification and drawings will be required even if the amendment is accompanied by an oath or declaration in accordance with 37 CFR 1.63 or 37 CFR 1.67.

If new subject matter is added to the disclosure, whether it be in the abstract, the specification, or the drawings, the examiner should object to the introduction of new matter under 35 U.S.C. 132 or 251 as appropriate, and require applicant to cancel the new matter. If new matter is added to the claims, the examiner should reject the claims under 35 U.S.C. 112, first paragraph – written description requirement. *In re Rasmussen*, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981). The examiner should still consider the subject matter added to the claim in making rejections based on prior art since the new matter rejection may be overcome by applicant.

In an instance in which the claims have not been amended, *per se*, but the specification has been amended to add new matter, a rejection of the claims under 35 U.S.C. 112, first paragraph should be made whenever any of the claim limitations are affected by the added material.

Whenever an objection or rejection is made based on 35 U.S.C. 112, first paragraph, the examiner should in the interest of expeditious prosecution call attention to 37 CFR 1.118.

When an amendment is filed in reply to an objection or rejection based on 35 U.S.C. 112, first paragraph, a study of the entire application is often necessary to determine whether or not "new matter" is involved. Applicant should therefore specifically point out the support for any amendments made to the disclosure.

## II. REVIEW OF NEW MATTER OBJECTIONS AND/OR REJECTIONS

A rejection of claims is reviewable by the Board of Patent Appeals and Interferences, whereas an objection and requirement to delete new matter is subject to supervisory review by petition under 37 CFR 1.181. If both the claims and specification contain new matter either directly or indirectly, and there has been both a rejection and objection by the examiner, the issue becomes appealable and should not be decided by petition.

## III. CLAIMED SUBJECT MATTER NOT DISCLOSED IN REMAINDER OF SPECIFICATION

The claims as filed in the original specification are part of the disclosure and therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the applicant may amend the specification to include the claimed

subject matter. *In re Benno*, 768 F.2d 1340, 226 USPQ 683 (Fed. Cir. 1985). Form Paragraph 7.44 may be used where originally claimed subject matter lacks proper antecedent basis in the specification. See MPEP § 608.01(o).

## 2163.07 Amendments to Application Which Are Supported in the Original Description

Amendments to an application which are supported in the original description are NOT new matter.

### I. REPHRASING

Mere rephrasing of a passage does not constitute new matter. Accordingly, a rewording of a passage where the same meaning remains intact is permissible. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973). The mere inclusion of dictionary or art recognized definitions known at the time of filing an application would not be considered new matter. If there are multiple definitions for a term and a definition is added to the application, it must be clear from the application as filed that applicant intended a particular definition, in order to avoid an issue of new matter and/or lack of written description.

### II. OBVIOUS ERRORS

An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of error in the specification, but also the appropriate correction. *In re Oda*, 443 F.2d 1200, 170 USPQ 260 (CCPA 1971).

Where a non-English foreign priority document under 35 U.S.C. 119 is of record in the application file, applicant may not rely on the disclosure of that document to support correction of an error in the pending application. *Ex parte Bondiou*, 132 USPQ 356 (Bd. App. 1961). This prohibition would apply regardless of the language of the foreign priority documents because a claim for priority is simply a claim for the benefit of an earlier filing date for subject matter that is common to two or more applications, and does not serve to incorporate the content of the priority document in the application in which the claim for priority is made. This prohibition does not apply in a situation where the original application is in a non-English language (37 CFR 1.52(d)), or where the original application explicitly incorporates a non-English language document by reference.

designated a *specific species claim*), or a claim may include two or more of the disclosed embodiments within the breadth and scope of definition (and thus be designated a *generic or genus claim*).

*Species are always the specifically different embodiments.*

Species are *usually* but not always independent as disclosed (see MPEP § 806.04(b)) since there is usually no disclosure of relationship therebetween. The fact that a genus for two different embodiments is capable of being conceived and defined, does not affect the independence of the embodiments, where the case under consideration contains no disclosure of any commonality of operation, function or effect.

#### **806.04(f) Claims Restricted to Species, by Mutually Exclusive Characteristics**

Claims to be restricted to different species must be mutually exclusive. The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites limitations which under the disclosure are found in a first species but not in a second, while a second claim recites limitations disclosed only for the second species and not the first. This is frequently expressed by saying that claims to be restricted to different species must recite the mutually exclusive characteristics of such species.

#### **806.04(h) Species Must Be Patentably Distinct From Each Other**

Where an applicant files a divisional application claiming a species previously claimed but nonelected in the parent case, pursuant to and consonant with a requirement to restrict, there should be no determination of whether or not the species claimed in the divisional application is patentable over the species retained in the parent case since such a determination was made before the requirement to restrict was made.

In a national application containing claims directed to more than a reasonable number of species, the examiner should not require restriction to a reasonable number of species unless he or she is satisfied that he or she would be prepared to allow claims to each of the claimed species over the parent case, if presented in a divisional application filed according to the requirement. Restriction should not be required if the species claimed are considered clearly unpatentable over each other.

In making a requirement for restriction in an application claiming plural species, the examiner should group together species considered clearly unpatentable over each other, with the statement that restriction as between those species is not required.

Where generic claims are allowed in a national application, applicant may claim in the *same application* additional species as provided by 37 CFR 1.141.

Where, however, an applicant optionally files another national application with claims to a different species, or for a species disclosed but not claimed in a parent case as filed and first acted upon by the examiner, there should be close investigation to determine the presence or absence of patentable difference. See MPEP § 804.01 and § 804.02.

#### **806.04(i) Generic Claims Presented for First Time After Issue of Species**

The Office no longer follows the practice of prohibiting the allowance of generic claims that are presented for the first time after the issuance of a copending application claiming plural species. Instead, the Office may reject the generic claims on the grounds of obviousness-type double patenting. Applicant may overcome such a rejection by filing a terminal disclaimer. See *In re Braithwaite*, 379 F.2d 594, 154 USPQ 29 (CCPA 1967).

#### **806.05 Related Inventions**

Where two or more related inventions are being claimed, the principal question to be determined in connection with a requirement to restrict or a rejection on the ground of double patenting is whether or not the inventions as claimed are distinct. If they are distinct, restriction may be proper. If they are not distinct, restriction is never proper. If nondistinct inventions are claimed in separate applications or patents, double patenting must be held, except where the additional applications were filed consonant with a requirement to restrict in a national application.

The various pairs of related inventions are noted in the following sections.

### 806.05(a) Combination and Subcombination or Element

A combination is an organization of which a subcombination or element is a part.

Relative to questions of restriction where a combination is alleged, the claim thereto must be assumed to be allowable (novel and unobvious) as pointed out in MPEP § 806.02, in the absence of a holding by the examiner to the contrary. When a claim is found in a patent, it has already been found by the Office to be allowable and must be treated on that basis.

### 806.05(b) Old Combination — Novel Subcombination

Restriction is ordinarily not proper between a combination (AB) that the examiner holds to be old and unpatentable and the subcombination (B) in which the examiner holds the novelty, if any, to reside. *Ex parte Donnell*, 1923 C.D. 54, 315 O.G. 398 (Comm'r Pat. 1923). See MPEP § 820.01.

### 806.05(c) Criteria of Distinctness for Combination, Subcombination, or Element of a Combination

In order to establish that combination and subcombination inventions are distinct, two-way distinctness must be demonstrated.

To support a requirement for restriction, both two-way distinctness and reasons for insisting on restriction are necessary, i.e., separate classification, status, or field of search. See MPEP § 808.02.

The inventions are distinct if it can be shown that a combination as claimed:

(A) does not require the particulars of the subcombination as claimed for patentability (to show novelty and unobviousness), and

(B) the subcombination can be shown to have utility either by itself or in other and different relations.

When these factors cannot be shown, such inventions are not distinct.

The following examples are included for general guidance.

### I. SUBCOMBINATION NOT ESSENTIAL TO COMBINATION

#### *AB<sub>br</sub>/B<sub>sp</sub> Restriction Proper*

Where a combination as claimed does not set forth the details of the subcombination as separately claimed and the subcombination has separate utility, the inventions are distinct and restriction is proper if reasons exist for insisting upon the restriction; i.e., separate classification, status, or field of search.

This situation can be diagramed as combination AB<sub>br</sub> ("br" is an abbreviation for "broad"), and subcombination B<sub>sp</sub> ("sp" is an abbreviation for "specific"). B<sub>br</sub> indicates that in the combination the subcombination is broadly recited and that the specific characteristics set forth in the subcombination claim B<sub>sp</sub> are not set forth in the combination claim.

Since claims to both the subcombination and combination are presented and assumed to be patentable, the omission of details of the claimed subcombination B<sub>sp</sub> in the combination claim AB<sub>br</sub> is evidence that the patentability of the combination does not rely on the details of the specific subcombination.

### II. SUBCOMBINATION ESSENTIAL TO COMBINATION

#### *AB<sub>sp</sub>/B<sub>sp</sub> No Restriction*

If there is no evidence that combination AB<sub>sp</sub> is patentable without the details of B<sub>sp</sub>, restriction should not be required. Where the relationship between the claims is such that the separately claimed subcombination B<sub>sp</sub> constitutes the essential distinguishing feature of the combination AB<sub>sp</sub> as claimed, the inventions are not distinct and a requirement for restriction must not be made, even though the subcombination has separate utility.

### III. SOME COMBINATION CLAIMS RECITE SPECIFIC FEATURES OF THE SUBCOMBINATION BUT OTHER COMBINATION CLAIMS GIVE EVIDENCE THAT THE SUBCOMBINATION IS NOT ESSENTIAL TO THE COMBINATION.

#### *AB<sub>sp</sub>/AB<sub>br</sub> (Evidence Claim)/B<sub>sp</sub> Restriction Proper*

Claim AB<sub>br</sub> is an evidence claim which indicates that the combination does not rely upon the specific details of

the subcombination for its patentability. If claim AB<sub>br</sub> is subsequently found to be unallowable, the question of rejoinder of the inventions restricted must be considered and the letter to the applicant should so state. Therefore, where the combination evidence claim AB<sub>br</sub> does not set forth the details of the subcombination B<sub>sp</sub> and the subcombination B<sub>sp</sub> has separate utility, the inventions are distinct and restriction is proper if reasons exist for insisting upon the restriction.

In applications claiming plural inventions capable of being viewed as related in two ways, for example, as both combination—subcombination and also as different statutory categories, both applicable criteria for distinctness must be demonstrated to support a restriction requirement. See also MPEP § 806.04(b).

Form Paragraph 8.15 may be used in combination—subcombination restriction requirements.

#### ¶ 8.15 Combination—Subcombination

Inventions [1] and [2] are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because [3]. The subcombination has separate utility such as [4].

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to both combination(s) and subcombination(s) (MPEP § 806.05(c)).
2. In situations involving evidence claims, see MPEP § 806.05(c), example 3, and explain in bracket 3.
3. In bracket 4, suggest utility other than used in the combination.
4. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

The burden is on the examiner to suggest an example of separate utility.

If applicant proves or provides an argument supported by facts, that the other utility, suggested by the examiner, cannot be accomplished, the burden shifts to the examiner to document a viable separate utility or withdraw the requirement.

#### 806.05(d) Subcombinations Usable Together

Two or more claimed subcombinations, disclosed as usable together in a single combination, and which can be shown to be separately usable, are usually distinct from each other.

Care should always be exercised in this situation to determine if the several subcombinations are generically claimed. See MPEP § 806.04(b).

Form Paragraph 8.16 may be used in restriction requirements between subcombinations.

#### ¶ 8.16 Subcombinations, Usable Together

Inventions [1] and [2] are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case invention [3] has separate utility such as [4]. See MPEP § 806.05(d).

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to subcombinations usable together (MPEP § 806.05(d)).
2. In bracket 3, insert the appropriate group number or identify the invention.
3. In bracket 4, suggest utility other than with the other invention.
4. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

Only one-way distinctness is required.

The examiner must show, by way of example, that one of the subcombinations has utility other than in the disclosed combination.

Care must be taken to determine if the subcombinations are generically claimed.

Where subcombinations as disclosed and claimed are both (a) species under a claimed genus and (b) related, then the question of restriction must be determined by both the practice applicable to election of species and the practice applicable to related inventions. If restriction is improper under either practice, it should not be required (MPEP § 806.04(b)).

The burden is on the examiner to provide an example.

If applicant proves or provides an argument, supported by facts, that the other use, suggested by the examiner, cannot be accomplished or is not reasonable, the burden is on the examiner to document a viable alternative use or withdraw the requirement.

#### 806.05(e) Process and Apparatus for Its Practice — Distinctness

In applications claiming inventions in different statutory categories, only one-way distinctness is generally needed to support a restriction requirement. See MPEP § 806.05(c).

Process and apparatus for its practice can be shown to be distinct inventions, if either or both of the following can be shown: (1) that the process *as claimed* can be practiced by another materially different apparatus or by hand, or (2) that the apparatus *as claimed* can be used to practice another and materially different process.

If the apparatus claims include a claim to "means" for practicing the process, the claim is a linking claim and must be examined with the elected invention. If it is ultimately allowed, rejoinder is required. See MPEP § 809.04.

Form Paragraph 8.17 may be used to make restriction requirements between process and apparatus.

#### ¶ 8.17 Process and Apparatus

Inventions [1] and [2] are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case [3].

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to both a process and apparatus for its practice (MPEP § 806.05(e)).
2. In bracket 3, use one or more of the following reasons:
  - a -- the process as claimed can be practiced by another and materially different apparatus such as ..... --,
  - b -- the process as claimed can be practiced by hand --,
  - c -- the apparatus as claimed can be used to practice another and materially different process such as ..... --.
3. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

The burden is on the examiner to provide reasonable examples that recite material differences.

If the apparatus claims include a claim to "means" for practicing the process, this claim is a linking claim (except for the presence of this claim restriction between apparatus and process claims would be proper). The linking claim must be examined with the elected invention, but only to the extent necessary to determine if the linking claim is unpatentable. If the linking claim is unpatentable, restriction is proper.

It should be noted that a claim such as, "An apparatus for the practice of the process of claim 1, comprising ...." and then the claim continues with purely apparatus limitations, is not a linking claim. This is merely a preamble similar to a statement of intended use and should be treated as any preamble.

If applicant proves or provides convincing argument that there is no material difference or in the case of a process that cannot be performed by hand (if examiner so argued), the burden is on the examiner to document another materially different process or apparatus or withdraw the requirement.

#### 806.05(f) Process of Making and Product Made — Distinctness

A process of making and a product made by the process can be shown to be distinct inventions if either or both of the following can be shown: (1) that the process as claimed is not an obvious process of making the product and the process as claimed can be used to make other and different products, or (2) that the product as claimed can be made by another and materially different process.

Allegations of different processes or products need not be documented.

A product defined by the process by which it can be made is still a product claim (*In re Bridgeford*, 357 F.2d 679, 149 USPQ 55 (CCPA 1966)) and can be restricted from the process if the examiner can demonstrate that the product as claimed can be made by another materially different process; defining the product in terms of a process by which it is made is nothing more than a permissible technique that applicant may use to define the invention.

If applicant convincingly traverses the requirement, the burden shifts to the examiner to document a viable alternative process or product, or withdraw the requirement.

Form Paragraph 8.18 may be used in restriction requirements between product and process of making.

#### ¶ 8.18 Product and Process of Making

Inventions [1] and [2] are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case [3].

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to both a product and the process of making the product (MPEP § 806.05(f)).
2. In bracket 3, use one or more of the following reasons:
  - a -- the process as claimed can be used to make a materially different product such as ..... --,
  - b -- the product as claimed can be made by a materially different process such as ..... --.
3. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

#### 806.05(g) Apparatus and Product Made — Distinctness

An apparatus and a product made by the apparatus can be shown to be distinct inventions if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the

product and the apparatus as claimed can be used to make other and different products, or (2) that the product as claimed can be made by another and materially different apparatus.

Form Paragraph 8.19 may be used for restriction requirements between apparatus and product made.

#### ¶ 8.19 Apparatus and Product Made

Inventions [1] and [2] are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case [3].

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to both the apparatus and product made (MPEP § 806.05(g)).
2. In bracket 3, use one or more of the following reasons:
  - a) -- the apparatus as claimed is not an obvious apparatus for making the product and the apparatus as claimed can be used to make a different product such as ..... --,
  - b) -- the product can be made by a materially different apparatus such as ..... --.
3. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

#### ONLY ONE-WAY DISTINCTNESS IS REQUIRED

The examiner must show by way of example either (A) that the apparatus as *claimed* is not an obvious apparatus for making the product and the apparatus as *claimed* can be used to make other and different products or (B) that the product as *claimed* can be made by another and materially different apparatus.

The burden is on the examiner to provide an example, but the example need not be documented.

If applicant either proves or provides convincing argument that the alternative example suggested by the examiner is not workable, the burden is on the examiner to suggest another viable example or withdraw the restriction requirement.

#### 806.05(h) Product and Process of Using

A product and a process of using the product can be shown to be distinct inventions if either or both of the following can be shown: (A) the process of using as claimed can be practiced with another materially different product, or (B) the product as claimed can be used in a materially different process.

The burden is on the examiner to provide an example, but the example need not be documented.

If the applicant either proves or provides a convincing argument that the alternative use suggested by the

examiner cannot be accomplished, the burden is on the examiner to support a viable alternative use or withdraw the requirement.

Form Paragraph 8.20 may be used in restriction requirements between the product and method of using.

#### ¶ 8.20 Product and Process of Using

Inventions [1] and [2] are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case [3].

##### Examiner Note:

1. This form paragraph is to be used when claims are presented to both the product and process of using the product (MPEP § 806.05(h)).
2. In bracket 3, use one or more of the following reasons:
  - a) -- the process as claimed can be practiced with another materially different product such as ..... --,
  - b) -- the product as claimed can be used in a materially different process such as ..... --.
3. Conclude restriction requirement with one of form paragraphs 8.21.01 through 8.21.03.

#### 806.05(i) Product, Process of Making, and Process of Using — Product Claim Not Allowable

37 CFR 1.141. *Different inventions in one national application.*

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(b) Where claims to all three categories, product, process of making, and process of use, are included in a national application, a three way requirement for restriction can only be made where the process of making is distinct from the product. If the process of making and the product are not distinct, the process of using may be joined with the claims directed to the product and the process of making the product even though a showing of distinctness between the product and process of using the product can be made.

Where an application contains claims to a product, claims to a process specially adapted for (i.e., not patentably distinct from, as defined in MPEP § 806.05(f)) making the product, and claims to a process of using the product, and the product claims are not allowable (i.e., not novel and nonobvious), restriction is proper between the process of making and the process of using. In this instance, applicant may be required to elect either (1) the product and process of making it, or (2) the process of using. Unless the examiner can make a showing of distinctness between the process of using and the product (MPEP § 806.05(h)), the product must also be joined with the process of using in grouping (2).

Where the product claims are allowable (i.e., novel and nonobvious), restriction may be required only where the process of making and the product made are distinct

(MPEP § 806.05(f)); otherwise, the process of using must be joined with the process of making and product made, even if a showing of distinctness can be made between the product and process of using (MPEP § 806.05(h)).

Determination of patentability of the product need not be made prior to making a requirement for restriction unless the requirement is based on a determination that the product claims are not allowable.

Form paragraph 8.20.01 may be used in product, process of making and process of using situations where the product is not allowable.

**¶ 8.20.01 Product, Process of Making and Process of Using—Product Not Allowable**

Inventions [1] and [2] are related as process of making and process of using the product. The use as claimed cannot be practiced with a materially different product. Since the product is not allowable, restriction is proper between said method of making and method of using. The product claim will be examined along with the elected invention (MPEP § 806.05(i)).

**Examiner Note:**

This form paragraph is to be used when claims are presented to the product, process of making and process of using where the product claim(s) are not allowable (MPEP § 806.05(i)).

**807 Patentability Report Practice Has No Effect on Restriction Practice**

Patentability report practice (MPEP § 705), has no effect upon, and does not modify in any way, the practice of restriction, being designed merely to facilitate the handling of cases in which restriction cannot properly be required.

**808 Reasons for Insisting Upon Restriction**

Every requirement to restrict has two aspects: (1) the reasons (as distinguished from the mere statement of conclusion) why the inventions *as claimed* are either independent or distinct, and (2) the reasons for insisting upon restriction therebetween as set forth in the following sections.

**808.01 Independent Inventions**

Where the inventions claimed are independent, i.e., where they are not connected in design, operation, or effect under the disclosure of the particular application under consideration (MPEP § 806.04), *the facts relied on for this conclusion are in essence the reasons for insisting upon restriction*. This situation, except for species, is but

rarely presented, since persons will seldom file an application containing disclosures of independent things.

Form Paragraph 8.20.02 may be used when claims are directed to independent, unrelated inventions.

**¶ 8.20.02 Unrelated Inventions**

Inventions [1] and [2] are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions [3].

**Examiner Note:**

1. This form paragraph is to be used only when claims are presented to unrelated inventions, e. g., a necktie and a locomotive bearing.
2. In bracket 3, insert reasons for concluding that the inventions are unrelated.

**808.01(a) Species**

Where there is no disclosure of relationship between species (see MPEP § 806.04(b)), they are independent inventions and election of one invention following a requirement for restriction is mandatory even though applicant disagrees with the examiner. There must be a patentable difference between the species as claimed. See MPEP § 806.04(h). Since the claims are directed to independent inventions, restriction is proper pursuant to 35 U.S.C. 121, and it is not necessary to show a separate status in the art or separate classification.

A single disclosed species must be elected as a prerequisite to applying the provisions of 37 CFR 1.141 to additional species if a generic claim is allowed.

Even if the examiner rejects the generic claims, and even if the applicant cancels the same and admits that the genus is unpatentable, where there is a relationship disclosed between species, such disclosed relation must be discussed and reasons advanced leading to the conclusion that the disclosed relation does not prevent restriction, in order to establish the propriety of restriction.

**Election of species should not be required if the species claimed are considered clearly unpatentable (obvious) over each other.** In making a requirement for restriction in an application claiming plural species, the examiner should group together species considered clearly unpatentable over each other, with the statement that restriction as between those species is not required.

Election of species should be required prior to a search on the merits (1) in all applications containing claims to a plurality of species with no generic claims, and (2) in all applications containing both species claims and generic or Markush claims.